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TABLE 2

Chemical analyses, by X-ray fluorescence (XRF) spectrometry, and based on weight when fired to 925 C, of the <1 micron size fraction of pure smectites used in experiments.

Oxide	Wyoming montmorillonite Weight % oxide	Kinney montmorillonite Weight % oxide
SiO <sub>2</sub>	66.44	66.87
Al <sub>2</sub> O <sub>3</sub>	22.93	22.40
Fe <sub>2</sub> O <sub>3</sub>	4.48	1.42
MgO	2.91	5.25
CaO	3.27	0.06
K <sub>2</sub> O	0.07	0.03
Na <sub>2</sub> O	0.45	4.38
TiO <sub>2</sub>	0.11	0.13
Total	100.66	100.54

TABLE 1

Unpublished mineralogical composition of clays (in weight %) used in antibacterial experiments.							
	Sample name						
	Argicur (ABC)	Pyroclay (ABC)	Blue clay (ABC)	Weathered Blue (NABC)	Argiletz (NABC)	Miraculite (NABC)	Ormalite (NABC)
NON-CLAYS							
Quartz	1.2	43.2	44.6	46.0	18.2	11.1	13.8
Feldspar	6.8	1.9	0.9	2.9	5.6	12.0	0.0
Amphibole	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Pyrite	trace	3.4	9.6	0.0	0.0	0.0	0.0
Barite	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Gypsum	0.0	1.2	0.0	0.9	0.0	1.9	0.0
Anatase	0.0	0.0	0.0	0.2	0.0	0.0	0.7
Jarosite	0.0	0.8	0.2	0.0	0.0	8.7	0.0
Magnetite/maghemite/ goethite	0.0	1.0	0.0	0.0	0.0	5.0	0.0
Calcite	5.7	0.0	0.0	0.0	17.8	0.0	0.0
Total non-clays	13.7	52.5	55.8	50	41.6	38.7	14.5
CLAYS							
Kaolinites	0.0	0.4	0.7	2.9	0.9	0.0	5.5
Illite + muscovite	49.2	9.7	7.6	30.9	43.3	17.2	78.7
Chlorite	0.0	3.2	4.4	0.8	4.5	0.0	0.0
Rectorite	0.0	26.2	48.4	24.9	0.0	0.0	1.7
Smectite	33.9	0.0	0.0	0.0	18.5	46.7	0.0
Pyrophyllite	0.0	2.9	0.0	0.0	0.0	0.0	0.0
Gibbsite	0.0	0.0	0.0	0.0	0.0	1.2	0.0
Total clays	83.1	42.4	61.1	59.5	67.2	65.1	85.9
Total	96.8	94.9	116.9	109.5	108.8	103.8	100.4

ABC = antibacterial clay; NABC = non-antibacterial clay. Clays were analyzed by quantitative X-ray diffraction using the RockJock computer program (Eberl, 2003).